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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,591	08/01/2001	Ian Bendell	076776-0115	2579

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WASHINGTON, DC 20007

EXAMINER

CIRIC, LJILJANA V

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,591

Applicant(s)

BENDELL ET AL.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
4a) Of the above claim(s) 23 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 21, 22 and 24-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 14, 2005 has been entered.
2. New claims 21 through 36 remain in the application.

Response to Arguments

3. Applicant's arguments with respect to claims 21 through 26 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

4. Claim 23 is hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention or species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 20, 2002.

Drawings

5. The replacement drawings were received on March 14, 2005. These drawings are hereby approved.

Specification

6. Receipt and entry of the amended abstract is hereby acknowledged.

Claim Objections

7. Claims 27, 34, and 36 are objected to because of the following informalities: "a" should be deleted immediately following "wherein" [claim 27, line 1]; "a" should be inserted immediately

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preceding each of “three-zone” and “four zone” [claim 34, line 2], for improved grammatical correctness and readability. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 21 through 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 as written recites “for guiding air to *front interior zones* of a motor vehicle” in lines 6-7, but due to the lack of consistent terminology it is not clear whether or not this limitation refers back to the front internal vehicle compartment(s) as previously recited in the limitations “a motor vehicle having *front and rear internal vehicle compartments*” in the preamble of the claim. Claim 22 is similarly rendered unclear due to the limitation “rear interior zones”. Consistent terminology must be used throughout the claims in order to achieve the required clarity.

It is not clear whether the term “therein” [claim 21, line 21; claim 33, line 21; and, claim 34, line 17] refers back to the additional housing or to the rear temperature control unit, thus rendering indefinite the metes and bounds of protection sought by each of base claims 21, 33, and 34 as well as of claims 22 through 32, 35, and 36 depending therefrom. Recommend replacing the term “therein” with a direct recitation of whichever element(s) is referred to thereby.

It is not clear which particular structure if any is encompassed by the limitations “said air outlet opening being in parallel air flow relationship with said first heat exchanger” [claim 21, lines 9-10; claim 33, lines 9-10; claim 34, lines 5-6], thus rendering the metes and bounds of protection sought by the claims indefinite.

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Claim 21 recites the limitation "said additional members (i) and (ii)" in lines 23-24. There is insufficient antecedent basis for this limitation in the claim. Note that the limitations "said additional member being selected from the group consisting of (i) a releasable cover...; and (ii) a rear vehicle compartment temperature control unit..." in claim 21 ONLY requires the presence of ONE of the cover and the control unit and thus only ONE of these elements is necessarily encompassed within the scope of the claim. Thus, there is insufficient antecedent basis for reciting both. Claim 33 recites the same limitation and is similarly rendered indefinite thereby due to a lack of proper antecedent basis.

Similarly, each of the limitations "said additional housing" [claim 24, line 2; and claim 28, line 2]; "said rear temperature control unit" [claim 27, lines 2-3; claim 29, line 3; claim 29, lines 4-5; and, claim 32, lines 3-4]; and, "said removable cover" [claim 32, line 3] lacks proper antecedent basis since the limitations "said additional member being selected from the group consisting of (i) a releasable cover...; and (ii) a rear vehicle compartment temperature control unit..." in base claim 21 ONLY requires the presence of ONE of the cover and the control unit and thus only ONE of these elements (and not necessarily the one being subsequently recited in a dependent claim) is necessarily encompassed within the scope of the claim.

Also, claim 32 recites the limitation "mating arrangements" in line 3. There is insufficient antecedent basis for this limitation in the claim.

With regard to claim 34 as written, the scope of the preamble does not appear to be consistent with the scope of the body of the claim since the preamble indicates that the claimed invention is drawn to a conditioning housing only, yet the body of the claim proceeds to positively recite a heat exchanger as well as one of a releasable cover or a rear vehicle compartment temperature control unit, which renders the claim broader in scope than the preamble. Applicant's comment that claim 34 "is directed *only* to the conditioning housing" further renders the intended scope of protection sought indefinite.

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Each of dependent claims 35 and 36 recites plural alternative limitations, which coupled with the Markush alternative presented in the corresponding base claim, renders the scope of each of claims 35 and 36 generally indeterminable.

Claims 21 through 36 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element is: an evaporator or a second heat exchanger operably integrated within the conditioning housing.

The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed

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before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. As best can be understood in view of the indefiniteness of the claims, claims 21, 22, 24, 27 through 29 and 32 through 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Scoccia et al. (filed August 14, 2000).

Scoccia et al. discloses a vehicular heating and air-conditioning system essentially as claimed, including, for example: a conditioning housing 22; a first heat exchanger 12 operably integrated within the conditioning housing 22; an "additional member" comprising an additional housing or casing 24 and a second heat exchanger 14; interlocking connecting structure as shown in Figure 3; and, an air control element readable on partition 38 [see column 4, lines 57-60].

The reference thus reads on the claims.

12. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

13. Alternately for claims 21, 22, 24, 28, 29, 33, and 34, and as best can be understood in view of the indefiniteness of the claims, claims 21, 22, 24 through 26, 28, 29, 31, 33, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsurushima et al. ('991 B1, filed March 10, 2000).

Tsurushima et al. discloses a vehicular heating and air-conditioning system essentially as claimed, including, for example: a conditioning housing C1; a first heat exchanger 13 operably integrated within the conditioning housing C1; an "additional member" comprising an additional housing C2 and a second heat exchanger 12 operably integrated therein; connecting structure for coupling housing C1 to housing C2 [see column 3, lines 64-67]; an air control element or air flap readable on any one door 23; and, partitions 21 and 22 separating each of the first and second heat exchangers 13 and 12 into respective left and right portions as shown in Figure 4.

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The reference thus reads on the claims.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. As best can be understood in view of the indefiniteness of the claims, claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsurushima et al. ('991 B1) in view of Umebayahi et al. (previously of record).

Tsurushima et al. ('991 B1) discloses a vehicular heating and air conditioning system essentially as claimed, including a first heat exchanger or heater 13 operably integrated within the conditioning housing C1, but does not disclose the first heat exchanger or heater 13 as comprising a plurality of electrically activated positive temperature coefficient elements as recited in claim 30.

Nevertheless, it is well-known in the art and taught by Umebayahi et al. to include electrically activated positive temperature coefficient or heating elements 51 in vehicular HVAC heaters in order to supplement engine heat in vehicles having a diesel engine or in electrical or hybrid vehicles. See column 2, lines 33-41 of Umebayahi et al.

Thus, it would have been obvious to one skilled in the art at the time of invention to modify the vehicular HVAC system of Tsurushima et al. ('991 B1) by adding a plurality of electrically activated positive temperature coefficient elements or heating elements to the HVAC heater as taught by Umebayahi et al. in order to supplement engine heat in at least diesel-, electrical-, or hybrid-powered vehicles as needed to enable sufficient heating of the vehicle's interior compartment in cold weather using the vehicular HVAC system.

Conclusion


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16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene, can be reached at 571-272-4930.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ljiljana (Lil) V. Ciric
Primary Examiner
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